



# ***The Resonator***

**Official Newsletter of The Fair Lawn (NJ) Amateur Radio Club**

**Volume 10, Number 7**

**[www.FairLawnARC.org](http://www.FairLawnARC.org)**

**July 2025**

## **INSIDE THIS ISSUE**

- 1 President's Message
- 2 Upcoming Events
- 3 Working POTA in Ireland – Chris KE2NJ
- 4 2025 FLARC Hamfest Sponsors
- 5 Notable Hams – W8JK
- 6 FLARC 2025 Field Day Report
- 8, 14 FLARC Info Archives
- 8 Running WinLink under Linux
- 9 FLARC Info Flyer
- 10 Officers, Committees and Assignments
- 11 Special Interest Groups (SIGs)
- 13 Editor's Corner – Jim Jalil W2KNG
- 14 FLARC Club Apparel
- 16 Theoretics – Fred W2ABE
- 16 Hamspeak – Fred W2ABE
- 17 Mystery Morse on 40 meters – Fred KR2H
- 19 Pay FLARC Dues On-Line
- 20 FLARC Membership / Renewal Form
- 21 Renew ARRL Membership via FLARC
- 21 Business Meeting Notes

## **President's Message**

Hello all FLARC Members,

Our Hamfest was to be held on June 14, 2025. However, the G-d's were not with us and it rained most of the day. Our original rain date was June 21, 2025; however, due to a conflict with another Hamfest, we were asked by the ARRL to move our Hamfest to another date. By doing this we showed our true colors as being a great club for amateur radio. Our NEW DATE is September 20, 2025. If you really want to mark your calendar, next year's Hamfest is June 6, 2026, and a rain date of June 13, 2026. These dates have already been approved and listed on the ARRL website.

As you know, June 22 was the Fair Lawn Street Fair. Unfortunately, it rained again most of the morning and we decided it was not worth setting up. I would like to thank Jim W2JC, Skip KD2BRV and Larry WA2WLY for showing up in the rain.

Since I am writing this in the middle of June, I hope that we had a great field day. I would like to say thanks to all the great FLARC members that helped.

I would like to also say thank you to all the great FLARC members that helped with the Fair Lawn fireworks. This is one of the ways we 'repay' the Community Center for providing us with our "home."

Again, please note that all Kawfee Tawks will begin at 7 PM, with the regular business meeting starting at 7:30 PM.

At the July 11, 2025 meeting (the Friday before was July 4th) Andrea Slack K2EZ will give us a Kawfee Tawk and her topic is "What is a rover?"

We will be holding a FOX hunt on August 16<sup>th</sup> – more details as we get closer to the date. Karl W2KBF and Brian KD2KLN will be the FOX, so go find them. A prize will be given to the winner or winners who find the fox.

For new members, a "Fox Hunt" involves setting up a low power transmitter at some hidden location, and the

**Continued on next page.**

**Remember:  
Ham Radio Is a Contact Sport!**

## President's Message, continued

"hunters" use radio receivers and directional antennas, and maps and GPS, to try to locate the hidden "fox." If you are new to the game, any of the old timers will be glad to have you join with them and see how it's done.

August 1<sup>st</sup> Kawfee Tawk will be with Brian N2BTD on doing POTA (Parks on the Air) from Ireland.

I have tried to cover some of the items that the club will be doing. So please think about becoming a more active member and being part of a terrific club! PLEASE reach out to me or anyone on the Board if you have an idea or a complaint.

73,

Gene WO2W

WO2W@ARRL.net

**BE AN**



## FLARC calendar of upcoming events

July 11<sup>th</sup>

Kawfee Tawk™ — "What is a Rover?"

July 11<sup>th</sup>

FLARC Business Meeting



### JULY 11, 2025 KAWFEE TAWK™

Andrea Slack, K2EZ will be talking about what a rover is and what a rover does in a contest.

Her presentation will be from 7PM to 7:30 PM, before the regular meeting.

She might arrive a bit early to allow admiration of her porcupine-vehicle out in the parking lot!

August 1<sup>st</sup>

Kawfee Tawk™ — POTA in Ireland

August 1<sup>st</sup>

FLARC Business Meeting

August 16<sup>th</sup>

FOX Hunt – find the RF Fox, and Portable Day ...

September 20<sup>th</sup>

FLARC Hamfest



KA2YRA says:

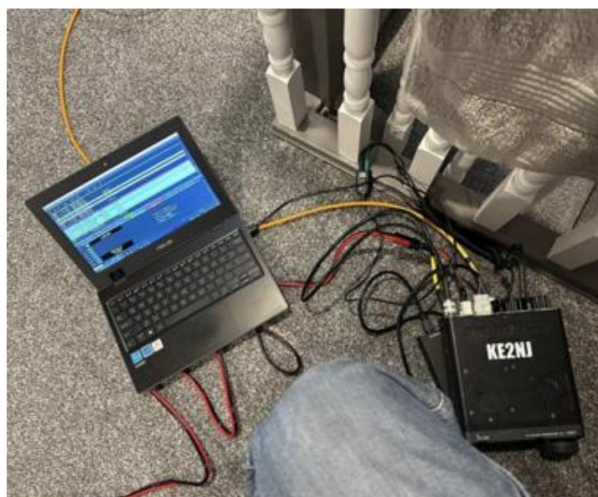
The inevitable destiny of any cord or wire I store neatly, after only a few seconds ...



## **AUGUST 1, 2025 KAWFEE TAWK™**

Chris Kerrigan KE2NJ will be talking about  
operating POTA from the parks and castles of IRELAND  
on his recent Spring vacation.

His presentation will be from 7PM to 7:30 PM,  
before the regular meeting.



## Our 2025 Hamfest Sponsors

**AF7KB Books**

<https://fasttrackham.com/>



<https://ARRL.org>



www.DXEngineering.com • 1-800-777-0703

Kantronics

<https://kantronics.com/>

**Powerwerx**

<https://powerwerx.com>

We very much appreciate the  
Sponsorships and  
Door Prize Donations received  
from the groups and companies  
whose logos are shown above.

**Notable Hams**

by Jim Jalil W2KNG

This column features notable hams both past and present. This month we feature a giant in the world of radio astronomy, John D Kraus W8JK.



John Kraus was born in Michigan in 1910. A true Michigan “wolverine,” John received his Bachelor of Science, Master of Science and PhD in physics (1933) from the University of Michigan. A quick check of the arithmetic shows he had his PhD by the age of 23, certainly very fast track. After graduation he remained at the University of Michigan for several years working with what was then a state of the art cyclotron doing atomic particle physics.

During World War II John worked with the War Department in Washington DC, working on “degaussing” the electromagnetic fields of Navy ships in an attempt to make them safe from magnetic mines. He also worked on radar countermeasures. For his contribution to the war effort John received the U.S. Navy Meritorious Civilian Service Award.

After the war John joined the faculty at arch-rival Ohio State University, where he stayed for the rest of his career. At Ohio State he began work on scanning the cosmos using telescopes — not searching the visible light spectrum, but rather searching radio waves. In 1953 John constructed a 96 helix antenna to map the universe through radio waves, a ground breaking effort at the time. Next came perhaps the highlight of John’s career: the construction and operation of the Ohio State “Big Ear” Radio Telescope. This was a tiltable, flat reflector mounted on a fixed parabolic reflector, a design which would have many uses in the years that followed. But John Kraus’ was the first.

As an aside John was active in SETI, the Search for Extraterrestrial Intelligence using the radio spectrum.

By the way, the famous “WOW” signal was picked up via the Big Ear Telescope in 1977.

John Kraus was ever the educator. He was the thesis advisor to an astonishing 58 PhD and Masters candidates. He was the author of numerous college and graduate school textbooks, including “Antennas,” “Electromagnetics” and “Radio Astronomy,” which for years were the mainstay of academic curriculums.

John’s professional associations and awards were many, including election to the National Academy of Engineering and a Fellow of the Institute of Electrical and Electronic Engineers. He has also been awarded the Centennial Medal, the Edison Medal and the Hertz Medal from the IEEE.

John Kraus was a lifelong ham radio operator. He was first licensed as a young man in the late 1920s with the call sign W8JK, a call he held for the rest of his life. In 2001, CQ Magazine named him to the inaugural class of the Amateur Radio Hall of Fame. He was an incorrigible antenna designer and tinkerer, developing many innovative designs, including the 8JK “Closely Spaced Array” and the Corner Reflector. None other than Edwin Armstrong went out of his way to write John Kraus about his Corner Reflector stating: “Please let me congratulate you on a very fine piece of work.”

But John’s most famous invention, which grew out of ham radio, was the helix antenna design which to this day is used in global positioning satellites among many other applications.



John Kraus passed away in 2004. He was a true 20<sup>th</sup> century scientific pioneer, whose work still resonates to this day. Like so many brilliant scientific minds who have shaped the modern world, it all began with ham radio. Famous as John Kraus was, to us, he was just another ham on the air, John W8JK

**John Kraus W8JK SK**

## FIELD DAY 2025

Under an early summer sky the intrepid members of the Fair Lawn Amateur Radio Club gathered at Memorial Park on Saturday June 28<sup>th</sup> to raise antennas, set up stations and put together all the varied and diverse elements of a Field Day operation.

This year tents were left behind and the entire Field Day set up was established under the pavilion.

While there was some cross band modulation, over the course of the event being in one spot seemed to enhance the comrade and social aspect of the event (which, as the ARRL is never slow to remind us, is not a contest).

While it is never a good idea to list all the participants lest someone be inadvertently omitted, a few standouts deserve mention. First in the hearts of all participants is Chef Skip KD2BRV who once again made sure everyone was well fed. While rain did not dampen his efforts this year as it has in the past, his dedication to the culinary aspect of Field Day is always appreciated.



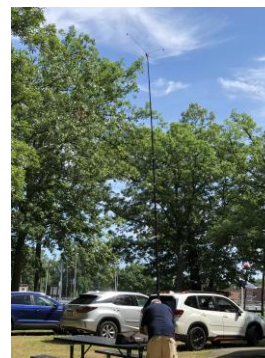
The overnight crew of Van W2DLT and Dave N2AAM kept the generators running all night, while they and Roz KD2GKA kept the sideband station on the air all through the night.

Noel W2MSA was omnipresent as always and seemed to be everywhere at all times – helping, operating and making sure everything went smoothly.

— reported by Jim W2KNG & Jim W2JC



Dave WO2X handled all the networking and computing aspects while also setting up a unique antenna system with wires going off in all manner of directions, but which worked fine.



A highlight of the event was the satellite antenna and station set up by Steve WI2W. Through his efforts many satellite QSO were made, including a very special one made late in the day Sunday when Steve actually spoke with an astronaut aboard the International Space Station in orbit 254 miles over Memorial Park. Now that's DX !



In the background, Jim W2JC was keeping an eye on [and making a record of] all the special activities and conditions that will get us a couple of thousand Bonus Points in our score [even though it's not a contest!].

Continued on next page.

## FIELD DAY 2025, continued

One category of bonus points was for having a GOTA [Guests on the Air] station set up, in addition to the regular FD stations. Robert KC2ORX and Carolyn W2KAR took care of that, after some technical problems presented an opportunity for an educational session for a number of newer, and not-so-new, hams.

While setting up Carolyn's new wire antenna, things were not working very well. A small "class" gathered around to learn how to troubleshoot an antenna problem. Visual inspection, ohmmeter tests and antenna analyzer sweeps were done – with an explanation of why and how.



Each of the group then had the chance to use the antenna analyzer and to see how length and continuity of the antenna affected resonant frequency and SWR. (The problem was found to be a broken solder connection inside the Balun box.)

In all everything went smoothly. We had several visitors and a few showed genuine interest in what we were doing and in ham radio in general.

Those who showed that level of interest walked away with brochures, always at the ready for just such a potential ham.

We were visited by the Mayor of Fair Lawn, and the Mayor of Oakland, NJ (who is a ham!) in addition to reps from the American Red Cross and other agencies.



In addition, since we were set up opposite the Fair Lawn town pool, a number of "civilians" stopped by to learn what we were doing.

If the purpose of Field Day is to test the ability of hams to set up operation in the field using "off the grid" power, to showcase ham radio to the community (yes, we still do that), to come together as a club and enjoy the company of fellow hams and to generally have a blast, then... mission accomplished.

By the way, even though Field Day is not a contest, our score was approximately 3470 — not a bad showing at all for only two transmitters.

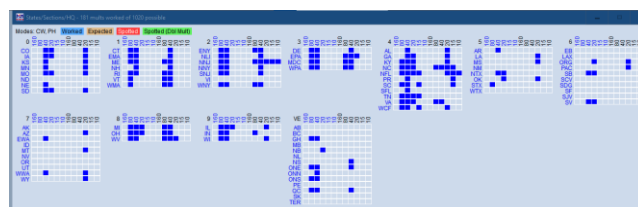


## PRELIMINARY score info for W2NPT —

W2NPT Score - 2,120 Points				
Contest: FD				
Band	Mode	QSOs	Pts	
3.5	CW	106	212	
3.5	LSB	29	29	
7	CW	250	500	
7	LSB	133	133	
14	CW	35	70	
14	FT8	22	44	
14	USB	46	46	
21	CW	6	12	
21	USB	10	10	
28	USB	4	4	
Total	Both	641	1060	
Score: 2,120				

Bonus Points are expected to add approximately 1350 additional points to our site score.

Statistics for FD - 2025-06-28 18:00:00 - Mode & Band by Operator												
File												
Statistics Graph												
Operator	CW 3.5	CW 7	CW 14	CW 21	FT8 14	LSB 3.5	LSB 7	LSB 14	USB 21	USB 28	Tot	
K2ZC	106	84									190	
KD2KLN							8				8	
KD2YEW									1	9	10	
KE2CPS							1				1	
KE2FWN						1	1				2	
N2BTD							106				106	
N2WKS									4		4	
NP4H		103	5	4							112	
W2DLT						28			27		55	
W2MSA		31	30	2			14			1	4	82
W2NPT		18									18	
W2SCT		5					3				8	
W3EH		3									3	
W2W		6									6	
W02X					22				13		35	
WS2DLT									1		1	
Total	106	250	35	6	22	29	133	46	10	4	641	



## 2025 Dues are overdue ☹️

New members: only \$20 for your first year !

There are no changes to dues for the upcoming year.

Renew now, and let us know what activities or features would make you more active with the club.

Please make checks payable to:

“Fair Lawn Amateur Radio Club”

and send them to:

Fair Lawn ARC  
– Attn: Treasurer  
10-10 20<sup>th</sup> Street  
Fair Lawn, NJ 07410

Please include a member application form with your  
\$25 check regardless of your member status.  
It can be found near the back of this newsletter.



## EmComm SIG Updates

### [Emergency Communications via Ham Radio]

Amateur radio operators use their training, skills, and equipment to provide communications during emergencies. Hams serve our communities when storms or other disasters damage critical communication infrastructure, including cell towers, and wired and wireless networks. Amateur radio can function completely independently of the internet and phone systems. An amateur radio station can be set up almost anywhere in minutes. Hams can quickly raise a wire antenna in a tree or on a mast, connect it to a radio and power source, and communicate effectively with others.

## Running Winlink under Linux

Several people have had mixed success in repurposing old, obsolete PCs for EMCOMM use.

Earlier this year Bob Murdock WX2NJ, ARES EC for Ocean County, NJ prepared a document that describes his success in installing Linux, Winlink Express, VARA and VARA FM on an old PC. Download is available at —

[https://gloucestercountyararc.weebly.com/uploads/1/1/5/5/11554662/linux\\_winlink\\_vara.pdf](https://gloucestercountyararc.weebly.com/uploads/1/1/5/5/11554662/linux_winlink_vara.pdf)

— Karl W2KBF

## The Resonator Is Now Archived!

Ever wanted to search for something in *The Resonator*? Maybe a member profile. Perhaps a past Street Fair. Even who participated at Field Day in 2017.

Now you can. *The Resonator* has now been accepted as part of the Digital Library of Amateur Radio and Communications. DLARC is a project of the Internet Archive (the not-for-profit online library best known for *The Wayback Machine*.) DLARC is growing to be a massive online library of the past and present of ham radio and related communications. It is funded by a grant from Amateur Radio Digital Communications.

When you need to find something, go to:

<https://archive.org/details/flarc-resonator>

You can use the search "text contents" field to do a full-text search on all issues or click "Date Published" to see them sorted by publication date.

## Get Direct With FLARC!

Here is a direct link to specific club info: just a click away!

<http://apparel.FairLawnARC.org>

<http://auction.FairLawnARC.org>

<http://blog.FairLawnARC.org>

<http://calendar.FairLawnARC.org>

<http://events.FairLawnARC.org>

<http://exams.FairLawnARC.org>

<http://facebook.FairLawnARC.org>

<http://news.FairLawnARC.org>

<http://swap.FairLawnARC.org>

<http://tech.FairLawnARC.org>

<http://youtube.FairLawnARC.org>

<https://groups.io/g/FairLawnARC>



The FLARC EmComm SIG is working closely with the NENJ-ARES group (North East NJ) to create an area-wide corps of well prepared hams who can handle emergency communications accurately and efficiently.

Times have changed and we can now use digital message formats as well as voice messaging.

If you would like to learn more about this phase of ham radio, send an email to —

[main+owner@NENJ-ARES-EMCOMM.groups.io](mailto:main+owner@NENJ-ARES-EMCOMM.groups.io)

or contact Jim N2JLF at [N2JLF@arrl.net](mailto:N2JLF@arrl.net)

# The Fair Lawn Amateur Radio

Why is FLARC New Jersey's Most Exciting Radio Club?

## Annual and Special Events



- Field Day
- Winter Field Day
- World Amateur Radio Day
- Portable Day
- Earth and Environmental Days
- Field Trips
- Club Exchanges
- Special Even
- Public Service Activities
- Public Events
- Ham fests and Auctions
- Foxhunts
- Contests
- Youth Activities and more



## There Is Something Every Night At FLARC!

Monday: Near and Far Net

Tuesday: DMR Net and Open House at the clubhouse

Wednesday: ARES/RACES Net

Thursday: Tech Net

Friday: Open House at the clubhouse or *Kawfee Tawk* Speaker Series (Monthly via Zoom)

Weekends: Open House at the clubhouse, POTA and other station activations, Contests, Foxhunts



## Special Interest Groups

- Portable Ops (POTA, SOTA, etc.)
- DX: Chase the rare ones
- Digital Voice: DMR and other modes
- FT8: Plus, other WSJT modes
- Satellite: Also, for weather interests
- Monitoring: SWL and other listening
- Contesting
- EMCOMM
- Radio Direction Finding
- Raspberry pi, Arduino



## Plus:

- A five-position operating station clubhouse
- An active repeater—W2NPT linked with NJ2BS.
- New antennas on the roof
- Monthly VE testing
- An award-winning newsletter
- Monthly speaker programs
- Educational programs and activities
- Active in-person and social networking
- An extensive video education archive

## That is Why FLARC Is the Most Exciting Club Around!

Come join us in-person or via Zoom for more activities, speakers, and projects!

[www.fairlawnarc.org](http://www.fairlawnarc.org)



**The Club** Fair Lawn ARC is the fastest growing ham club around, with five operating positions in a permanent clubhouse. Visitors and guests are always welcome. The club is open every Friday night, except when there is a Business Meeting scheduled, from NLT 6:30 PM. Business meetings are the first Friday of the month at 7:30PM.

#### 2025 Officers, Committees and Assignments

President	Gene Ottenheimer	WO2W
Vice President	Nomar Vizcarrondo	NP4H
Treasurer	Robert Marchini	KD2SOG
Secretary	Jim Cooper	W2JC
Trustee	Judith Shaw	KC2LTM
Trustee	Lowell "Van" VantSlot	W2DLT
Trustee	Noel Pagan	W2MSA
Member Services Health & Welfare	Judith Shaw	KC2LTM
Marketing	Nomar Vizcarrondo Jim Cooper	NP4H W2JC
Program	[open]	
Video/YouTube	Thom Guida	W2NZ
Social Media	Brian Duddy Thom Guida Dave Marotti	N2BTD W2NZ NK2Q
Photographer	Robert Marchini	KD2SOG
Community Relations	Gene Ottenheimer Dave Gotlib	WO2W KD2MOB
Field Day 2026	[open]	
Winter Field Day 2026	[open]	
Hamfest	Gene Ottenheimer	WO2W
Auction	Brian Cirulnick	KD2KLN
Education	[open]	
Youth Outreach	Robert Marchini	KD2SOG
Adult Outreach	Lowell "Van" VantSlot Jim Cooper	W2DLT W2JC
VE Testing Coordinator	Gene Ottenheimer	WO2W
Special Events	James Gallo	KB2FMH
Contests	Lowell Vant Slot	W2DLT
FLARC Historian	Fred Belghaus	KR2H [W2AAB]
Webmaster	Jim Cooper	W2JC
Asst. Webmaster	David Kozinn	K2DBK
Technical Chair	Dave deCoons	WO2X
EmComm	Jim Breheny	N2JLF
RACES/ARES Director	Dave Gotlib	KD2MOB
RACES/ARES Liaison	Steve Wraga	WA2BYX
Newsletter Editor	Jim Jalil	W2KNG
Newsletter Publisher	Jim Cooper	W2JC
Club Station Manager	Noel Pagan	W2MSA
Quartermaster	Fred Wawra	W2ABE

## Want a Call Sign License Plate?

Amateur Radio (Ham operators) license plates may be purchased for a \$15 fee, for passenger vehicles, but not for commercial vehicles or motorcycles. (Applicants must be licensed by the Federal Communications Commission.)

Call MVC at 609.292.6500 or (toll free in NJ) 888.486.3339 to request an application.

The club has applications from time to time. If you would like an application, visit the "contact us" page, and we'll get one out to you.. Or find the form and detailed instructions at:

<https://www.state.nj.us/mvc/pdf/vehicles/SP-23.pdf>



## Letters:

### A feature of *The Resonator*

The editor has received a lot of nice notes, letters and comments about this newsletter and the club in general. We have not published them in the past but going forward we will at least try.

Here are the grounds rules:

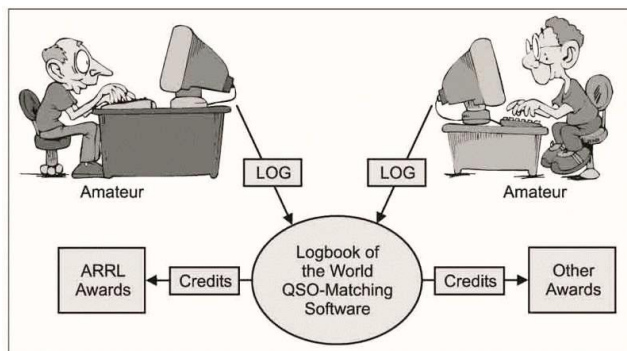
- Please keep all comments as brief and succinct as possible.
- No personal attacks.
- No political rants.
- No comments promoting violence, racism, religious intolerance, vulgarity, obscenity, or other such discourteous behavior.
- The Editor reserves the right to exclude any comments that violate our guidelines and may subject the writer to further disciplinary action by the club.

# A QSL card is the final courtesy of an amateur radio contact.

[https://en.wikipedia.org/wiki/QSL\\_card](https://en.wikipedia.org/wiki/QSL_card)

**INCOMING QSL Bureau** -- if you have been making on-the-air contacts, you might very well have a package of exciting QSL cards from around the world waiting for you at the incoming QSL Bureau. If you previously received cards from them, check to see if you have any “credits” left by going to [https://www.njdx.org/?page\\_id=869](https://www.njdx.org/?page_id=869). If you never contacted them, they probably have cards for you! Go to this page -- [https://www.njdx.org/?page\\_id=25](https://www.njdx.org/?page_id=25) and get some ‘credits’ to cover the postage for mailing your cards to you.

To learn about the W2 Bureau, [https://www.njdx.org/?page\\_id=30](https://www.njdx.org/?page_id=30)



Those who upload logs to Logbook of the World become eligible to redeem confirmation credits for awards. LoTW wants and needs *all* logs. Uploading is free, so send your logs today!

## SIG Group Membership

Here is an update on the roster of Special Interest Groups... many groups have increased in size during the last month. About 45% of all members have joined at least one group.

<u>SIG Name</u>	<u>Leader</u>	<u>#</u>
Contesting	W2DLT	14
Digital Voice	N2AAM	30
EmComm	N2JLF	13
Monitoring	WX2R	25
DX	W2JC	18
FT8	W2JC	22
Satellites	N2AAM	20
Portable Ops	W2MSA	48
Radio Astronomy	WX2R	4
Raspberry pi		7
Direction Finding	W2KBF	6
<b>FLARC General</b>		<b>176</b>

## Follow FLARC ON THE WEB

**Facebook:** <http://facebook.FairLawnARC.org>

**Twitter:** @FairLawnARC

**Youtube:** <http://youtube.FairLawnARC.org>

**Website:** <http://FairLawnARC.org>

Sign up for a group... or ...  
why not start one?

Contact [webmaster@FairLawnARC.org](mailto:webmaster@FairLawnARC.org)  
if you would like to start a new  
Special Interest Group.

# The Clubhouse Is Open TWO Fridays In July!!

Date	Clubhouse Status
July 4	CLOSED – Holiday
July 11	CLOSED – Business Meeting at Fair Lawn <b>Senior</b> Center
July 18	OPEN
July 25	OPEN



**Pop-Up Tuesdays are now in-person at the club.**



**Editor's Corner — by Jim Jalil W2KNG**

Hopefully Field Day sparked some interest in portable operations. There are many hams at the Fair Lawn Amateur Radio Club who enjoy, among the many aspects of ham radio, operating away from the home station and out in the great outdoors. Some hams do this in all types of weather 12 months of the year. However for those less passionate about portable operations, summer is the most convenient and most comfortable time to set up a portable station and start making contacts.

The most active group of portable operators enjoy Parks on the Air, or POTA. Similar to POTA is Summits on the Air or SOTA. Any ham not familiar with these two forms of portable operation can find a wealth of knowledge about them on the ARRL website, among other Internet searches in general. But portable operation need not be focused on those organized systems. Portable operation can just be getting out in the fresh air and figuring out how to string up an antenna, plug in a battery and start making contacts.

An easy way to start might be to just set up a portable station in your own backyard, just to see how it can be done and, frankly, see if you enjoy the experience. Many an intrepid portable operator started out just that way. If you find you enjoyed the experience, the next step might be to venture to a local park. It need not be a POTA numbered park, it can just be a neighborhood or town park. Over time more adventurous expeditions can be undertaken.

Of course another way to get started in portable operating is to tag along with fellow members of the POTA Special Interest Group here at FLARC. The POTA SIG is by far the most active special interest group at the Club. Experienced portable operators would be more than happy to have you observe how they set up a portable station and give you guidance based on years of experience.

Some portable operators have elaborate systems and you may be drawn to that level of commitment. But it may be just an end fed antenna on a mobile rig plugged into a battery putting out 10 watts which is right for you... and that can be just as much fun.

In any event summer is the best time to try your hand at portable operating. There are parks and beaches by the score waiting for hams to come and set up shop.

Why not consider being one of those.

**FLARC June 21, 2025  
VE Testing Results**

With VE testing back on schedule,  
Gene W02W reports the following results:

Name	Call	License Earned
Doug Faley	KE2FWN	General
Congrats to FLARC member Doug on upgrading to General Class		
Carolyn KE2FIO is now W2KAR		

Testing for next month will be at the  
Fair Lawn Recreation Center.

**Eleven Special Interest Groups [SIGs]  
Already Formed: Any Others?**

Club interest continues to grow in the SIGs.

Another recently formed SIG is for those interested in Raspberry Pi and Arduino projects, but now includes DoItYourself (DIY)/Makers kit building, 3D printing and similar topics.

A list of all of the current SIGs is shown on page 11.

Other possible groups, from the member survey, include:

- *Radio Propagation*
- *Antennas and how they work*
- *Ham radio software*
- *Technical assistance to club members*

Anyone interested in leading any of these groups...?

Please contact [webmaster@FairLawnARC.org](mailto:webmaster@FairLawnARC.org)

## Vast Archive of FLARC Activities and Info

Members are reminded that we have a large archive of YouTube videos of our previous many years of Kawfee Tawk™ presentations, which cover many aspects of ham radio. Our mostly unsung hero club videographer, Thom W2NZ, has spent thousands of hours of his own time creating really professional quality videos of these 167 presentations. Visit our club YouTube page and you will see all of them listed on the main page, at <http://youtube.FairLawnARC.org>

Another large and rather unused archive is that of our seven years of the club newsletter, The Resonator. They provide a nice historical record of the many activities of FLARC over the years, as well as lots of useful info about ham radio and electronics. The entire archive is at <http://newsletters.FairLawnARC.org>

And don't forget the FILES area of our groups.io website, where useful and important info is saved: <https://fairlawnarc.groups.io/g/main/files>

## Renew Your ARRL Dues... Send Free Money to FLARC!

The ARRL has a great program to support affiliated clubs in that it sends part of your dues back to the club if you renew through the club.

So... when you get your ARRL renewal, send both your check and your renewal application to our trusty Treasurer, who will take care of getting your renewal to Newington and a fat check for \$5.00 back to FLARC.

Nothing can be simpler...  
you just have to remember!!

Print and use the  
form on page 21  
of this issue of  
The Resonator



## Club Apparel — Get Them While They're **RED**!

Club apparel is always in vogue. Red is always "in" and your club friends all have them... you *want* a shirt or jacket for the next FLARC event! Great for Field Day!

Don't forget.... they're easy to order.

Go to [www.hamthreads.com](http://www.hamthreads.com)

or visit <http://apparel.FairLawnARC.org>

Check out the item selection that is posted on the **FLARC website (with pictures and prices)**. Order the shirts or other items you want with either the regular FLARC logo or the still-cool 60th anniversary logo. Note: **RED** is the primary and preferred club standard shirt color.

And why not WEAR your nice red shirt when you come to the club, especially for meetings and events.



It's easy to spot FLARC members  
wearing their red club shirts !

## Ham Radio Is Contagious And It Won't Make You Sick!!

### 2024 FLARC Net On The W2NPT Repeater:

*Near and Far Net • Mondays at 8PM*

*W2NPT Repeater and EchoLink*

**Special Note:** As non-profit, the IRS now requires that we disclose annually the use of paid lobbyists to our members and indicate approximately what percentage of their dues goes toward that. 0% of your dues payment will be used by the club to directly pay a lobbyist firm to lobby on behalf of all our members regarding pending legislation that impacts our hobby.



**NEWHAMS.INFO**

Training, information, and encouragement for new amateur radio operators.

<https://newhams.info/>

### BEQUEATHS AND DONATIONS

Planned gifts usually imply the family donation of amateur equipment to the club when someone has become a Silent Key. But it can be more. Club members might consider making a gift through a will or trust; gifts that help provide lifetime income to the club. Consult with your lawyer, estate planner or tax advisor if you feel such a gift is worthy.

### About The Club

*The Resonator* is published monthly and is the official (and only) newsletter of The Fair Lawn Amateur Radio Club. FLARC was established in 1956 and has met continuously since inception. **The club is sponsored by the Borough of Fair Lawn.** The club meets every Friday, except when a Business Meeting is scheduled, at 6PM at the club station in The Fair Lawn Community Center, 10-10 20th Street, Fair Lawn, NJ. Business meetings are the first Friday of the month at 7:30 PM at the Fair Lawn Senior Center, and on Zoom.

Visitors **ARE ALWAYS** welcome at our meetings.

FLARC operates the W2NPT repeater (145.470- PL 167.9) located high atop the Community Center. The analog repeater is open to all amateurs for use without restrictions.

The club has nearly two hundred paid members.  
Dues are currently \$25 per year;  
\$20 for new members.

For more information, please see our website, at  
<http://membership.FairLawnARC.org>

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Thanks!  
for your  
Support!!

**This is YOUR club.... Be a part of it !!**



**FAIR LAWN'S  
COMMUNICATIONS CENTER!**

***With Our Antennas On The Roof!***



## Theoretics Demystified

This time after looking at Automatic Volume Control or AVC we will get into Automatic Frequency Control. Back in the days of early FM radio, especially for FM broadcast, there was a problem of the tuned station seeming to drift.

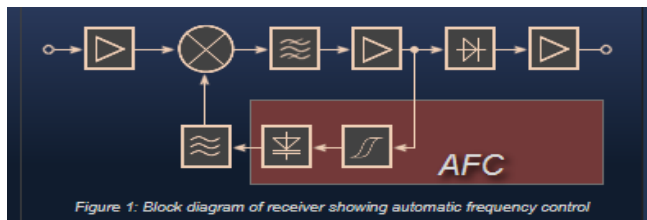
This problem does not exist on AM broadcast since the bandwidth required is much less and the modulation does not depend on the frequency.

The problem was not on the transmit side of things but with the receivers. A way was needed to solve the problem of 'drifting' tuners, so a method of controlling the local oscillators used in tuning was needed that would keep them steady and not drifting.

This drifting was mostly caused by components heating during use and system loading of the oscillator's output. Back when first designed, discrete components were used – as compared to today's circuits that use integrated circuits and specially designed 'chips'.

To control frequency drift in FM receivers, the circuit depends upon a stable local oscillator; but that may drift in frequency causing the resulting IF frequency to be higher or lower than the designed operating frequency. If the resulting IF frequency is lower or higher than it needs to be, the discriminator [FM detector circuit] sends a correction voltage to the voltage controlled variable capacitor [varicap] – which is part of the oscillator's reactance circuit and thereby adjusts the oscillator's frequency back to the desired frequency.

For FM broadcast receivers it is 10.7 Megahertz.



In more modern and recent equipment, all of this is done on a chip using what is called a phase lock loop. In theory it operates the same way as the

## Hamspeak

### Symbology Explained



This symbol is for an amplifier function.



This symbol denotes a mixer function. It mixes the local oscillator output with the incoming signal.



This symbol denotes the IF bandpass filter.



This symbol denotes the detector function.



This symbol is for the discriminator which develops the correction signal for the varactor diode.



This symbol is the varactor diode which 'tunes' the local oscillator correcting any drift in frequency.



This symbol denotes the local oscillator which is adjusted by the varactor diode to correct any oscillator drift.

— Fred Wawra, W2ABE

circuit described above; but instead of correcting frequency changes the changes in a single phase are sensed and corrected, thereby making for a much more accurate system.

In older FM broadcast receivers and tuners, there was an option to turn AFC off and this was done when initially tuning in a specific station. In modern receiving circuits the AFC is always active. This is especially important in modern ham equipment where frequent stability is necessary, especially with digital communication systems.

If you are driving a car, you need to keep your hands on the steering wheel to correct for drifting of the car due to any outside influences like wind, road conditions or objects in the road.

Think of AFC being the 'steering wheel' of the radio signal received, FM in particular.

Fred Wawra, W2ABE, 73.

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## Monitoring SIG Updates

A Special Interest Group SIG for those interested in SWL and other radio communications monitoring.



### Mystery Morse on 40 Meters — by Fred KR2H

I've always enjoyed a good mystery, and as a longtime UTE (Utility station) SWL / monitor, I'm always intrigued by strange, unidentified signals heard on the HF bands.

Over the years, I've monitored ships and coast stations passing messages on CW, ships using SSB as they arrive at port, various types of "number" stations sending long strings of 5-digit cipher texts using AM, SSB, and CW, and some clandestine networks using CW, that were probably military or paramilitary groups chatting in Spanish, and most likely originating from Latin America. Unidentified voice transmissions in Spanish or Portuguese are most likely originating from stations on boats, engaged in more nefarious activities.

But my interest is really piqued when I hear strange, unidentified stations operating *within an amateur band*, and almost certainly *NOT* amateurs.

Beginning on the evening of Thursday, June 12<sup>th</sup> local time, (Friday, June 13<sup>th</sup> in UTC), I discovered a group of unidentified CW stations on 40 meters, sending what at first sounded like gibberish. Listening more carefully, it became clear that these are foreign language transmissions in a Morse alphabet unknown to me. I quickly ruled out Cyrillic, the alphabet used in Russian, Ukrainian, Belarus and Bulgarian. I know Cyrillic, and have QSO'd stations in Russia and Ukraine using these languages and their unique Morse alphabets.

Although the code sounds somewhat like American Morse because there are a lot of "dits" combinations and some very long "dahs," it is not American Morse. It is a foreign language, one not using the Roman alphabet. The sending, which sounds like code sent manually, but that is almost certainly pre-recorded, is also rather "sloppy," far less accurate than the sending of a typical amateur. Rather like some of the bad "fists" I've heard from Maritime operators while at sea, or like a member of the Armed Forces, where Morse learning was mandated, but not necessarily appreciated.

The messages are repeated multiple times on each frequency pair, and over a period of about 20 minutes to one hour or more.

Signal strengths vary somewhat, but most are about equal in strength, and no less than S-9, but all have one peculiarity: they all have a "watery," somewhat distorted sound, characteristic of signals arriving by multipath, signals reflected off an aurora, or signals passing over one of the earth's poles.

The following is a list of all the frequencies being used:

7041.5	7050.0	7070.0
7043.0	7063.0	(7075.0)
7048.5	7068.0	

They possess another interesting property. They transmit simultaneously in pairs, sending the same text. Each frequency pair is separated by 7 kilohertz. The pairs are:

7041.5	& 7048.5
7043	& 7050
7063	& 7070
7068	& (7075)

The last of these pairs (7068/7075) is theoretical. All the other pairs are easily copied here, and clearly follow the 7 kilohertz spacing pattern, but tuning up to 7075 produces only strong FT8 signals which completely blanket the probable 7075 CW transmission, assuming also that the 7 kilohertz pairing follows along with the other pairs. When one pair ends transmission, another pair begins transmitting.

Why the "pairing" of frequencies? Jim W2JC, believes it is to insure accurate copy by the use of diversity techniques. I agree. Diversity transmission requires two or more transmitters sending on different (but nearby frequencies). Diversity reception requires the use of a specially designed "diversity" receiver capable of receiving two frequencies simultaneously (or two receivers) and two or more antennas – each either in different locations or at the receiver location but pointing in different directions. The signals are combined and "voting" circuitry selects the strongest to provide best copy.

This is necessary because of several factors: the presence of noise at the receiver location, signals that arrive via different paths, different angles and different polarizations. If only one receiver and one antenna is used where there is local noise, and the antenna favors one path, angle, or polarization, part or all of the transmission might not be received well enough to insure "solid copy."

For a detailed discussion on the several types of diversity reception, see:

[https://en.wikipedia.org/wiki/Diversity\\_scheme](https://en.wikipedia.org/wiki/Diversity_scheme)

There are times when one pair transmits a text that is different from the others. I have observed this on the 7041.5 / 7048.5 pair. At these times, the message lasts much longer, at least one hour. This suggests that this pair may convey actual information, while the other pairs, whose transmissions are shorter, may be nothing more than "disinfo," deliberately intended to deceive and mislead unauthorized listeners.

The signals are strongest early in the hours of our local darkness and gradually become weaker later as the propagation on 40 meters changes, with the band becoming "longer," and thus, signals are received stronger

Continued on next page.

## Monitoring SIG Update, continued.

farther away from us on the East Coast and weaker here. The earliest time I have been able to copy them has been at 2231 UTC (6:31 EDT), when the signals are just perceptible. They remain readable and usually quite strong well beyond 0200 UTC (10 PM EDT), at which time, I usually stop listening.

Another characteristic of these transmissions is that they are sent “blind.” That means without listening on their transmit frequency. They are not part of a “simplex” circuit, where two or more stations use a single frequency for real-time, 2-way communication. These transmissions are really “broadcasts,” whose intended recipients are well known to the originating station, and not directed for reception by others. I can’t help but wonder, then, why the 40 meter amateur band would be used, where there would be many listeners, and not on some obscure frequency on one of the many other HF bands. I wonder for whom these transmissions are targeted? Another mystery!

On that first night of hearing these stations, a couple of amateurs were in QSO one night on 7041 kHz. Suddenly, the powerful unidentified station came on right on top of them on 7041.5, causing the amateurs to QSY or QRT. It’s obvious that these transmissions originate from a Point-to-Point station, most likely operated by a government, military, or possibly a private company that leases transmitter time for a fee to unknown users. I think the most likely answer is either of the first two.

Point-to-Point stations (and shortwave broadcast stations) typically run high power (tens of kilowatts), and use high-gain, directive wire antennas such as Rhombics, Vee beams, or Sterba curtains, fixed on specific directions that can also be “nested” and switched to favor different directions. Others use rotatable Yagi-type gain antennas such as log periodics, which can cover many HF frequencies.

Not all the stations making these transmissions have the same signal strength here. This could mean that there are several transmitters, each in a different location, or that there is only one transmitter site using several transmitters and several directional antennas, each favoring a particular direction, and therefore delivering stronger or weaker signals when monitored here on the East Coast. Typically, the one-site, multi-transmitter, multi-antenna arrangement seems like a more realistic possibility. Point-to-Point stations require a lot of real estate, and if they are government or military run, they also require a secure, patrolled location.

There has already been some speculation about these transmissions expressed elsewhere. I posted an initial comment about them on the CW Operators club groups.io. Several members responded. These signals are being heard in Western Europe, South Africa, and several places in North America, as far west as the north central states. The operator in that north central state reported that the signals were also quite strong, and that

they had the same “watery” quality suggesting the effects of multipath. So what does that tell us? That the signals are arriving to North America by traveling over one or both of the earth’s poles? A respondent in Hawaii, however, said he heard nothing on those frequencies at the time. I wonder if he heard them later that night, when the band lengthened?

I went to the website of the *HF Underground*, a long-time SWL group that includes studies of “Utility” (commercial, military and government stations), as well as a group devoted to “Number” Stations (stations sending cipher groups in various languages as well as CW and digital modes), and unknown signals heard on HF. There were no comments in the *HF Underground’s* forums. I did find some comments on their *Facebook* page, however. Several individuals reported hearing these transmissions, most of them remarking about the “lousy fist” and “sloppy code” without guessing about their origin or purpose.

One respondent speculated that the transmissions might be a kind of FSK (Frequency Shift Keying), but an unknown variety, with frequency shift of 7 kilohertz. I’ve never heard of such a thing, and neither has long-time RTTY guru, Jim W2JC. Jim thought that it *might* be a kind of FSK, but at a very slow baud rate, like maybe 50 baud. Who would use such a slow baud rate? I cannot guess.

As to the texts of the messages sent, there are logical questions that remain unanswered. Since the Morse being sent is in an unfamiliar language, and therefore indecipherable to those unfamiliar with that language and type of Morse, it is impossible to determine whether the texts contain 4 or 5-character cipher groups or actual words. What makes this especially difficult to determine is the spacing between words or groups. Without knowing the Morse language, we may be hearing cipher groups or plain text, or we might be hearing nonsense. Another mystery is why the same texts are repeated so many times, and repeated again each day. As the King of Siam once famously said, “Tis a puzzlement.” They could be orders, advisories, warnings, or nothing more than disinformation to befuddle “the enemy.”

What “enemy?” I can only speculate, but since there are now open hostilities between two nations in the Middle East, the probability is that one of them is the source of these transmissions. Both Persian (Farsi) and Hebrew Morse codes exist. See this entry in *Wikipedia*:

[https://en.wikipedia.org/wiki/Morse\\_code\\_for\\_non-Latin\\_alphabets](https://en.wikipedia.org/wiki/Morse_code_for_non-Latin_alphabets)

Several times in the past, I have heard station 4XZ in the 40 meter band sending CW cipher texts. 4XZ is the IDF (Israel Defense Forces). They used several frequencies in the CW band, and once, a frequency in the phone band (around 7170, as I recall). Interestingly, the next day, there were news reports of missile or drone strikes launched against one of their neighboring countries. Coincidence?

The mystery continues, but I think we’re getting warm. If anyone has a definite answer, please share it.



## ELECTRONIC DUES PAYMENTS ARE NOW AVAILABLE!



**FLARC dues, new and renewal — and even donations! —  
can now be made on-line ...**

Until permanent arrangements can be made, several fiduciaries of the Fair Lawn Amateur Radio Club have graciously agreed to forward electronic payments to the Club's bank account.

Payments can be made using Zelle account.



- Log into your Zelle account
- Use the following phone number as the recipient: 201-240-9317
- In the notes section, include your Call Sign and what year(s) the dues are for

Once complete, you may – for added assurance - send a screenshot to [treasurer@FairLawnARC.org](mailto:treasurer@FairLawnARC.org)

– please be sure to redact any personal information –  
(e.g. bank account number, balance, etc.)

**For both new and renewal, please complete the Membership Application form at**  
**<https://FairLawnARC.com/membership.pdf>**

with your current info and either give it to a club officer  
or mail it to the address on the form.

For additional information on club membership, visit  
<http://membership.FairLawnARC.org>

Visit the club website at <http://FairLawnARC.org> for info about the club,  
club activities, club history and our club 2-meter repeater.

For a PDF form that can be filled in on-line, then printed and mailed with check, [CLICK HERE](#)

Or you can print this page, fill it in and mail to the address shown at the bottom.



## Fair Lawn Amateur Radio Club

*Fair Lawn Recreation and Community Center  
10-10 20th Street  
Fair Lawn, N.J. 07410*

### MEMBERSHIP/RENEWAL FORM

Name \_\_\_\_\_ Call \_\_\_\_\_  
Address \_\_\_\_\_ PO Box \_\_\_\_\_ Ste./Apt # \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Roster Published Phone # \_\_\_\_\_ Unpublished Phone # \_\_\_\_\_  
Roster Published EMAIL \_\_\_\_\_ License class: \_\_\_\_\_

Check all that apply      ARRL Member ?      RACES Member ?      ARES Member ?      CERT ?      VE ?

Additional Family Members (In same household) --

Name \_\_\_\_\_ Call \_\_\_\_\_

Name \_\_\_\_\_ Call \_\_\_\_\_

Introductory and Student Membership      \$ 20      \$ \_\_\_\_\_  
(Students under the age of 18 eligible for student membership)  
(Introductory membership open to new members  
or not a member in last 7 yrs)

Associate Membership \*      (No Fee)  
\* Open to Fair Lawn Residents Only. No voting rights or other privileges.

Renewal of Current Membership      \$ 25      \$ \_\_\_\_\_

Three Year Renewal Incentive      \$ 65      \$ \_\_\_\_\_

(Single memberships only, family memberships excluded)

Additional Family Members    # \_\_\_\_\_ at      \$ 5 each      \$ \_\_\_\_\_

Life Membership      \$ 625      \$ \_\_\_\_\_

Senior Life Membership (65 yrs. of age or over)      \$ 250      \$ \_\_\_\_\_

Equipment Fund Donation, above regular membership dues      \$ \_\_\_\_\_

Total submitted      \$ \_\_\_\_\_

\_\_\_\_\_ Date \_\_\_\_\_

I hereby acknowledge the By laws and rules and regulations of the club and will abide by them as amended

Please Note: Memberships are NOT Pro-Rated. Membership is from Jan 1<sup>st</sup> to Dec. 31<sup>st</sup> of any given year unless documented otherwise.

Please make your dues check payable to the "Fair Lawn Amateur Radio Club" and remit to the following address:

**Fair Lawn ARC  
– Attn: Treasurer  
10-10 20<sup>th</sup> Street  
Fair Lawn, NJ 07410**

Complete this form for NEW or RENEWAL of ARRL membership  
and give to FLARC Treasurer [David Gotlib KD2MOB] with your payment check.



**ARRL**  
The National Association for  
Amateur Radio®

## Membership Application

☐ New    ☐ Renew    ☐ Previous Member    ☐ Unlicensed

Name \_\_\_\_\_ Call Sign \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Email \_\_\_\_\_ Phone \_\_\_\_\_

Date of Birth \_\_\_\_ / \_\_\_\_ / \_\_\_\_

**My Family Member is Joining or Renewing: (\$12 per member)**

Name \_\_\_\_\_ Call Sign \_\_\_\_\_

Name \_\_\_\_\_ Call Sign \_\_\_\_\_

☐ Please note my new address    ☐ I do not want my name and address made available for non-ARRL related mailings

### Your Annual Membership Dues\*

Circle Your Choice (rates effective Jan. 1, 2024)

	1 Year	3 Years
Standard membership	\$59	\$174
Family (same membership exp. date and address)	\$12	\$36
Student (must be under age 26)	\$30	
Blind (requires one-time statement of legal blindness)	\$12	\$36

### Add-on ARRL Subscriptions

**QST**, ARRL's membership journal for active radio amateurs.

☐ 1 Year \$25\*    ☐ 3 Years \$75\*

**On the Air**, For beginner-to-intermediate-level radio amateurs.

☐ 1 Year \$25\*    ☐ 3 Years \$75\*

### Member Benefits

Your membership supports benefits, services, and programs that keep you active and on the air.

#### Membership Includes:

- Access to four digital magazines and archives (*QST*, *On the Air*, *QEX*, & *NCJ*)
- Unlimited courses through the ARRL Learning Center ([learn.arrl.org](http://learn.arrl.org))
- Logbook of The World®, contests, and award programs

...and more!

\*A print subscription for *QST* and/or *On the Air* requires an ARRL membership. Dues and subscription rates are subject to change without notice and are non-refundable

### Payment Information

\$ \_\_\_\_\_ Total Charge to:    ☐ Visa    ☐ MasterCard    ☐ AmEx    ☐ Discover    ☐ Check Enclosed

Card Number \_\_\_\_\_ Expiration Date \_\_\_\_\_

Card Holder's Signature \_\_\_\_\_

Toll Free (US) 1-888-277-5289 or 860-594-0200 • ARRL, 225 Main St., Newington, CT 06111-1400  
membership@arrl.org • [www.arrl.org/join](http://www.arrl.org/join)

CLUB  
form rev 1/24

## July 2025

### FLARC Business Meeting

#### Meeting summary

##### Quick recap

The meeting began with discussions about VHF contesting and mobile ham radio operations, including various antenna setups and propagation conditions. The group reviewed their recent Field Day event and discussed upcoming activities including a portable day and fox hunt at Memorial Grove. The club addressed maintenance and equipment updates, including a donation of radio equipment from the estate of Ori Smith, N2OOJ, and announced that board positions for 2026 would be open for nominations.

##### Next steps

- Noah to install new antenna on Tower 2 instead of Tower 1.
- Tech Committee to purchase Yaesu GDX 1000 rotator and Green Heron control box for antenna project.
- Chris KE2NJ to give a presentation on POTA in Ireland at the August Kawfee Tawk.
- Club members to participate in portable day and fox hunt on Saturday, August 16th at Memorial Grove.
- Club members to prepare for annual Hamfest on September 20th.
- Van and Noel to serve as the nominating committee for 2026 board positions.
- Interested members to contact the nominating committee or current board members about running for 2026 board positions.

#### Kawfee Tawk presentation

##### Roving in VHF Contesting

Andrea K2EZ discussed VHF contesting and the concept of roving, explaining that rovers move between grid squares to work stations they might not otherwise contact. She described various rover setups, from simple omni antennas to more complex directional and rotatable antennas, and highlighted why people choose to rove, including better propagation conditions and the opportunity to explore new locations. Andrea K2EZ also shared her experience starting in roving and emphasized the importance of knowing contest rules, coordinating with fixed stations, and using assistance rules to make contacts. She concluded by discussing her personal contest station setup and how it evolved over time.

##### Mobile Ham Radio Setup Evolution

Andrea K2EZ discussed her evolution of mobile ham radio setups, starting with simple dipoles and progressing to a complex setup with 22 antennas covering multiple bands from 80 meters to 3.4 GHz. She described her current setup, which includes six rigs, four transverters, and various amplifiers, mounted in her vehicle with a custom power distribution system. Andrea K2EZ shared statistics about her mobile operating, including over 10,000 contacts made over nine years, and mentioned her fuel economy drops from 19 to 14 miles per gallon when using the antennas while in motion.



## July 2025 FLARC Business Meeting, cont'd.

### HF Radio Operations and Propagation

Andrea K2EZ shared her experiences with high-frequency (HF) radio operations, focusing on successful contacts across various locations in the United States using Morse code and 2-meter frequencies. She demonstrated how signal strength and propagation vary with terrain and explained the concept of tropospheric ducting, which allows communication beyond the line of sight. Andrea K2EZ also showcased her 10 GHz setup and its capabilities during a contest, highlighting the challenges posed by weather conditions like rain scatter.

### Radio Setup and Maintenance Routine

Andrea K2EZ discussed her radio setup and maintenance routine, explaining that she uses a tablet with custom software for quick reference during band hopping. She described her experience with vehicle maintenance, including a deer collision that required removing everything from the vehicle. Andrea K2EZ also addressed questions about overhead clearance, noting that she sticks to interstates and open roads due to height restrictions. She explained her radio interference management system, which includes a duplexer for the 6-meter band and a triplexer for other high-power bands, ensuring adequate isolation between bands. The Kawfee Tawk presentation ended with a round of applause in appreciation.

## Meeting Summary

### Antenna Installation and Budget Updates

The meeting began with Secretary W2JC calling role of the Board and reporting that a quorum was present to conduct business. Treasurer KD2SOG gave his report of current funds and recent expenses followed by a discussion about the treasurer's report, which showed a decline in the club's balance due to funds being reserved for a postponed ham fest. The treasurer explained that the actual deficit was minimal, thanks to equipment sales and new memberships.

The group then discussed ongoing antenna work, noting a setback with Tower 1's mast not being strong enough to support the new antenna. As a result, plans have been changed to install the antenna on Tower 2, and the repeater antenna will be moved to a non-penetrating mount on the roof. The Tech Committee decided not to repair the broken tail twister antenna rotator due to high repair costs, opting instead to purchase a new Yaesu GDX-1000 rotator and a Green Heron control box.

### Club Updates and Upcoming Events

The club discussed their recent Field Day event, which was successfully held with two stations and a GOTA Get On The Air station, though they noted the south-west corner slab was unusable due to insect interference.

The president announced upcoming events including a portable day and fox hunt at Memorial Grove on August 16th, and their annual Ham Fest on September 20th. The president also shared that they received a significant donation of radio equipment from the estate of Ori Smith, N2OOJ, which included a Kenwood TS-950 and other items, and that they will be selling some of their older equipment. Finally, they announced that board positions for 2026 will be open, with nomination committee selection to be presented in October, nominations "from the floor" at the November meeting and voting at the December holiday party meeting.

Motion to close the meeting was made and seconded. Meeting closed at 20:25 EDT.

*Generated by Zoom AI and edited by Jim W2JC, FLARC Secretary.*